



House of Representatives

File No. 829

General Assembly

January Session, 2005

(Reprint of File No. 204)

Substitute House Bill No. 6732
As Amended by House Amendment
Schedule "A"

Approved by the Legislative Commissioner
June 2, 2005

AN ACT CONCERNING OCCUPATIONAL LICENSES FOR PERSONS ENGAGED IN SOLAR-RELATED WORK.

Be it enacted by the Senate and House of Representatives in General
Assembly convened:

1 Section 1. Section 20-330 of the general statutes is repealed and the
2 following is substituted in lieu thereof (*Effective October 1, 2005*):

3 As used in this chapter:

4 (1) "Contractor" means any person regularly offering to the general
5 public services of such person or such person's employees in the field
6 of electrical work, plumbing and piping work, solar work, heating,
7 piping, cooling and sheet metal work, fire protection sprinkler systems
8 work, elevator installation, repair and maintenance work, irrigation
9 work, automotive glass work or flat glass work, as defined in this
10 section;

11 (2) "Electrical work" means the installation, erection, maintenance,
12 alteration or repair of any wire, cable, conduit, busway, raceway,
13 support, insulator, conductor, appliance, apparatus, fixture or
14 equipment that generates, transforms, transmits or uses electrical

15 energy for light, heat, power or other purposes, but does not include
16 low voltage wiring, not exceeding twenty-four volts, used within a
17 lawn sprinkler system;

18 (3) "Plumbing and piping work" means the installation, repair,
19 replacement, alteration or maintenance of gas, water and associated
20 fixtures, laboratory equipment, sanitary equipment, other than
21 subsurface sewage disposal systems, fire prevention apparatus, all
22 water systems for human usage, sewage treatment facilities and all
23 associated fittings within a building and includes lateral storm and
24 sanitary lines from buildings to the mains, process piping, swimming
25 pools and pumping equipment, and includes making connections to
26 back flow prevention devices, and includes low voltage wiring, not
27 exceeding twenty-four volts, used within a lawn sprinkler system, but
28 does not include (A) solar work, except for the repair of those portions
29 of a solar hot water heating system that include the basic domestic hot
30 water tank and the tie-in to the potable water system, (B) the
31 installation, repair, replacement, alteration or maintenance of fire
32 prevention apparatus within a structure, except for standpipes that are
33 not connected to sprinkler systems, and (C) medical gas and vacuum
34 systems work. For the purposes of this subdivision, "process piping"
35 means piping or tubing that conveys liquid or gas that is used directly
36 in the production of a product for human consumption;

37 [(4) "Solar work" means the installation, repair, replacement,
38 alteration or maintenance of an active, passive or hybrid solar hot
39 water heating system;]

40 (4) "Solar thermal work" means the installation, erection, repair,
41 replacement, alteration, or maintenance of active, passive and hybrid
42 solar systems that directly convert ambient energy into heat or convey,
43 store or distribute such ambient energy;

44 (5) "Heating, piping and cooling work" means (A) the installation,
45 repair, replacement, maintenance or alteration of any apparatus for
46 piping, appliances, devices or accessories for heating systems,

47 including sheet metal work, and (B) the installation, repair,
48 replacement, maintenance or alteration of air conditioning and
49 refrigeration systems, boilers, including apparatus and piping for the
50 generation or conveyance of steam and associated pumping
51 equipment and process piping. Heating, piping and cooling work does
52 not include solar work or medical gas and vacuum systems work. For
53 the purposes of this subdivision, "process piping" means piping or
54 tubing that conveys liquid or gas that is used directly in the production
55 of a product for human consumption;

56 (6) "Apprentice" means any person registered with the Labor
57 Department for the purpose of learning a skilled trade;

58 (7) "Elevator installation, repair and maintenance work" means the
59 installation, erection, maintenance and repair of all types of elevators,
60 dumb waiters, escalators, and moving walks and all mechanical
61 equipment, fittings, associated piping and wiring from a source of
62 supply brought to the equipment room by an unlimited electrical
63 contractor for all types of machines used to hoist or convey persons or
64 materials, but does not include temporary hoisting machines used for
65 hoisting materials in connection with any construction job or project;

66 (8) "Elevator maintenance" means the lubrication, inspection and
67 replacement of controls, hoistway and car parts;

68 (9) "Fire protection sprinkler systems work" means the layout, on-
69 site fabrication, installation, alteration, maintenance or repair of any
70 automatic or manual sprinkler system designed for the protection of
71 the interior or exterior of a building or structure from fire, or any
72 piping or tubing and appurtenances and equipment pertaining to such
73 system including overhead and underground water mains, fire
74 hydrants and hydrant mains, standpipes and hose connections to
75 sprinkler systems, sprinkler tank heaters excluding electrical wiring,
76 air lines and thermal systems used in connection with sprinkler and
77 alarm systems connected thereto, foam extinguishing systems or
78 special hazard systems including water spray, foam, carbon dioxide or

79 dry chemical systems, halon and other liquid or gas fire suppression
80 systems, but does not include (A) any engineering design work
81 connected with the layout of fire protection sprinkler systems, or (B)
82 any work performed by employees of or contractors hired by a public
83 water system, as defined in subsection (a) of section 25-33d;

84 (10) "State Fire Marshal" means the State Fire Marshal or any
85 member of the Division of State Police to whom the Commissioner of
86 Public Safety has delegated powers under section 29-291;

87 (11) "Journeyman sprinkler fitter" means a specialized pipe fitter
88 craftsman, experienced and skilled in the installation, alteration,
89 maintenance and repair of fire protection sprinkler systems;

90 (12) "Irrigation work" means making the connections to back flow
91 prevention devices, and low voltage wiring, not exceeding twenty-four
92 volts, used within a lawn sprinkler system;

93 (13) "Sheet metal work" means the installation, erection,
94 replacement, repair or alteration of duct work systems, both ferrous
95 and nonferrous;

96 (14) "Journeyman sheet metal worker" means an experienced
97 craftsman skilled in the installation, erection, replacement, repair or
98 alteration of duct work systems, both ferrous and nonferrous;

99 (15) "Automotive glass work" means installing, maintaining or
100 repairing fixed glass in motor vehicles;

101 (16) "Flat glass work" means installing, maintaining or repairing
102 glass in residential or commercial structures; [and]

103 (17) "Medical gas and vacuum systems work" means the work and
104 practice, materials, instrumentation and fixtures used in the
105 construction, installation, alteration, extension, removal, repair,
106 maintenance or renovation of gas and vacuum systems and equipment
107 used solely to transport gases for medical purposes and to remove
108 liquids, air-gases or solids from such systems;

109 (18) "Solar electricity work" means the installation, erection, repair,
110 replacement, alteration, or maintenance of photovoltaic or wind
111 generation equipment used to distribute or store ambient energy for
112 heat, light, power or other purposes to a point immediately inside any
113 structure or adjacent to an end use;

114 (19) "Active solar system" means a system that uses an external
115 source of energy to power a motor-driven fan or pump to force the
116 circulation of a fluid through solar heat collectors and which removes
117 the sun's heat from the collectors and transports such heat to a location
118 where it may be used or stored;

119 (20) "Passive solar system" means a system that is capable of
120 collecting or storing the sun's energy as heat without the use of a
121 motor-driven fan or pump; and

122 (21) "Hybrid solar system" means a system that contains
123 components of both an active solar system and a passive solar system.

124 Sec. 2. Subsection (b) of section 20-334a of the general statutes is
125 repealed and the following is substituted in lieu thereof (*Effective*
126 *October 1, 2005*):

127 (b) The following licenses for solar thermal work may be issued by
128 the department, upon authorization of the examining board for
129 heating, piping, cooling and sheet metal work, under the provisions of
130 section 20-333, including an examination on solar work:

131 (1) A solar thermal contractor's license may be issued to any person
132 who (A) not later than July 1, 1984, (i) has been issued a P-1, P-3, S-1,
133 S-3, S-5, S-7, D-1 or D-3 license under subdivision (1) of subsection (a)
134 of this section or installs at least six fully operational solar hot water
135 heating systems, and (ii) qualifies for a solar thermal contractor's
136 license under section 20-333, or (B) has served as a solar thermal
137 journeyman for not less than two years.

138 (2) A solar thermal journeyman's license may be issued to any

139 person who (A) not later than July 1, 1984, (i) is issued a P-2, P-4, S-2,
140 S-4, S-6, S-8, D-2 or D-4 license under subdivision (2) of subsection (a)
141 of this section, and (ii) qualifies for a solar thermal journeyman's
142 license under section 20-333, (B) after July 1, 1984, is issued a P-2, P-4,
143 S-2, S-4, S-6, S-8, D-2 or D-4 license under subdivision (2) of subsection
144 (a) of this section and whose bona fide apprenticeship program
145 includes instruction in solar thermal work, or (C) after July 1, 1984,
146 completes a bona fide solar thermal work apprenticeship program and
147 has not less than two years' experience in solar thermal work. A solar
148 thermal journeyman may work only under the supervision of a
149 licensed solar thermal contractor.

150 (3) A solar thermal apprentice's permit may be issued for the
151 performance of solar thermal work for the purpose of training. Such
152 work may be performed only under the supervision of a licensed solar
153 thermal contractor or journeyman.

154 Sec. 3. Section 20-334b of the general statutes is repealed and the
155 following is substituted in lieu thereof (*Effective October 1, 2005*):

156 Any apprenticeship program established for the purpose of
157 providing education and training for persons seeking licensure for
158 plumbing and piping work or for heating, piping and cooling work
159 shall provide all such persons entering the program with education
160 and training in solar thermal work.

161 Sec. 4. Section 20-340 of the general statutes is repealed and the
162 following is substituted in lieu thereof (*Effective October 1, 2005*):

163 The provisions of this chapter shall not apply to: (1) Persons
164 employed by any federal, state or municipal agency; (2) employees of
165 any public service company regulated by the Department of Public
166 Utility Control or of any corporate affiliate of any such company when
167 the work performed by such affiliate is on behalf of a public service
168 company, but in either case only if the work performed is in
169 connection with the rendition of public utility service, including the
170 installation or maintenance of wire for community antenna television

171 service, or is in connection with the installation or maintenance of wire
172 or telephone sets for single-line telephone service located inside the
173 premises of a consumer; (3) employees of any municipal corporation
174 specially chartered by this state; (4) employees of any contractor while
175 such contractor is performing electrical-line or emergency work for
176 any public service company; (5) persons engaged in the installation,
177 maintenance, repair and service of electrical or other appliances of a
178 size customarily used for domestic use where such installation
179 commences at an outlet receptacle or connection previously installed
180 by persons licensed to do the same and maintenance, repair and
181 service is confined to the appliance itself and its internal operation; (6)
182 employees of industrial firms whose main duties concern the
183 maintenance of the electrical work, plumbing and piping work, solar
184 thermal work, heating, piping, cooling work, sheet metal work,
185 elevator installation, repair and maintenance work, automotive glass
186 work or flat glass work of such firm on its own premises or on
187 premises leased by it for its own use; (7) employees of industrial firms
188 when such employees' main duties concern the fabrication of glass
189 products or electrical, plumbing and piping, fire protection sprinkler
190 systems, solar, heating, piping, cooling, sheet metal or elevator
191 installation, repair and maintenance equipment used in the production
192 of goods sold by industrial firms, except for products, electrical,
193 plumbing and piping systems and repair and maintenance equipment
194 used directly in the production of a product for human consumption;
195 (8) persons performing work necessary to the manufacture or repair of
196 any apparatus, appliances, fixtures, equipment or devices produced by
197 it for sale or lease; (9) employees of stage and theatrical companies
198 performing the operation, installation and maintenance of electrical
199 equipment if such installation commences at an outlet receptacle or
200 connection previously installed by persons licensed to make such
201 installation; (10) employees of carnivals, circuses or similar transient
202 amusement shows who install electrical work, provided such
203 installation shall be subject to the approval of the State Fire Marshal
204 prior to use as otherwise provided by law and shall comply with
205 applicable municipal ordinances and regulations; (11) persons engaged

206 in the installation, maintenance, repair and service of glass or electrical,
207 plumbing, fire protection sprinkler systems, solar, heating, piping,
208 cooling and sheet metal equipment in and about single-family
209 residences owned and occupied or to be occupied by such persons;
210 provided any such installation, maintenance and repair shall be subject
211 to inspection and approval by the building official of the municipality
212 in which such residence is located and shall conform to the
213 requirements of the State Building Code; (12) persons who install,
214 maintain or repair glass in a motor vehicle owned or leased by such
215 persons; (13) persons or entities holding themselves out to be retail
216 sellers of glass products, but not such persons or entities that also
217 engage in automotive glass work or flat glass work; (14) persons who
218 install preglazed or preassembled windows or doors in residential or
219 commercial buildings; (15) persons registered under chapter 400 who
220 install safety-backed mirror products or repair or replace flat glass in
221 sizes not greater than thirty square feet in residential buildings; and
222 (16) sheet metal work performed in residential buildings consisting of
223 six units or less by new home construction contractors registered
224 pursuant to chapter 399a, by home improvement contractors registered
225 pursuant to chapter 400 or by persons licensed pursuant to this
226 chapter, when such work is limited to exhaust systems installed for
227 hoods and fans in kitchens and baths, clothes dryer exhaust systems,
228 radon vent systems, fireplaces, fireplace flues, masonry chimneys or
229 prefabricated metal chimneys rated by the Underwriter's Laboratory
230 or installation of stand-alone appliances including wood, pellet or
231 other stand-alone stoves that are installed in residential buildings by
232 such contractors or persons.

233 Sec. 5. (NEW) (*Effective October 1, 2005*) The Electrical Work Board
234 shall recommend regulations consistent with the provisions of sections
235 20-332 and 21a-7 of the general statutes to establish solar electric
236 contractor and journeyman licenses, for solar electricity work, as
237 defined in section 20-330 of the general statutes, as amended by this
238 act, which shall be adopted by the Commissioner of Consumer
239 Protection, in accordance with the provisions of chapter 54 of the

240 general statutes.

241 Sec. 6. Subdivision (4) of section 20-419 of the general statutes is
242 repealed and the following is substituted in lieu thereof (*Effective*
243 *October 1, 2005*):

244 (4) "Home improvement" includes, but is not limited to, the repair,
245 replacement, remodeling, alteration, conversion, modernization,
246 improvement, rehabilitation or sandblasting of, or addition to any land
247 or building or that portion thereof which is used or designed to be
248 used as a private residence, dwelling place or residential rental
249 property, or the construction, replacement, installation or
250 improvement of driveways, swimming pools, porches, garages, roofs,
251 siding, insulation, [solar energy systems] sunrooms, flooring, patios,
252 landscaping, fences, doors and windows and waterproofing in
253 connection with such land or building or that portion thereof which is
254 used or designed to be used as a private residence, dwelling place or
255 residential rental property or the removal or replacement of a
256 residential underground heating oil storage tank system, in which the
257 total cash price for all work agreed upon between the contractor and
258 owner exceeds two hundred dollars. "Home improvement" does not
259 include: (A) The construction of a new home; (B) the sale of goods by a
260 seller who neither arranges to perform nor performs, directly or
261 indirectly, any work or labor in connection with the installation or
262 application of the goods or materials; (C) the sale of goods or services
263 furnished for commercial or business use or for resale, provided
264 commercial or business use does not include use as residential rental
265 property; (D) the sale of appliances, such as stoves, refrigerators,
266 freezers, room air conditioners and others which are designed for and
267 are easily removable from the premises without material alteration
268 thereof; and (E) any work performed without compensation by the
269 owner on his own private residence or residential rental property.

<p>This act shall take effect as follows and shall amend the following sections:</p>
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Section 1	<i>October 1, 2005</i>	20-330
Sec. 2	<i>October 1, 2005</i>	20-334a(b)
Sec. 3	<i>October 1, 2005</i>	20-334b
Sec. 4	<i>October 1, 2005</i>	20-340
Sec. 5	<i>October 1, 2005</i>	New section
Sec. 6	<i>October 1, 2005</i>	20-419(4)

The following fiscal impact statement and bill analysis are prepared for the benefit of members of the General Assembly, solely for the purpose of information, summarization, and explanation, and do not represent the intent of the General Assembly or either House thereof for any purpose:

OFA Fiscal Note**State Impact:**

Agency Affected	Fund-Effect	FY 06 \$	FY 07 \$
Consumer Protection, Dept.	GF - Revenue Gain	Indeterminate	Indeterminate

Note: GF=General Fund

Municipal Impact: None

Explanation

The bill requires the Electrical Work Board in the Department of Consumer Protection (DCP) to recommend regulations establishing licenses for solar electricity work. This will result in a revenue gain to the state. However, it is uncertain the amount of the revenue gain, since it is unknown how many applicants will apply for the solar electricity work license.

House "A" strikes the original bill and replaces it with the language and fiscal impact as described above.

OLR Bill Analysis

sHB 6732 (as amended by House "A")*

AN ACT CONCERNING OCCUPATIONAL LICENSES FOR PERSONS ENGAGED IN SOLAR-RELATED WORK**SUMMARY:**

This bill requires the Electrical Work Board in the Department of Consumer Protection (DCP) to recommend regulations establishing licenses for solar electricity work. It also expands the scope and renames the license applying to solar-related work performed by heating, piping, and cooling tradesmen.

The law requires contractors performing home improvements to register with DCP and defines "home improvement" for that purpose. The bill eliminates "solar energy systems" from the illustrative list of types of "home improvements" and adds "sunrooms."

*House Amendment "A" replaces the original bill (File 204), which required DCP to study solar work licensing.

EFFECTIVE DATE: October 1, 2005

SOLAR ELECTRICITY WORK

The bill defines "solar electricity work" as the installation, erection, repair, replacement, alteration, or maintenance of photovoltaic or wind generation equipment used to distribute or store ambient energy for heat, light, power, or other purposes to a point immediately inside a structure or next to an end use. The bill requires the Electrical Work Board to recommend regulations establishing contractor and journeyman licenses for solar electricity work and requires the DCP commissioner to adopt them.

SOLAR THERMAL WORK

The law requires anyone performing "solar work" to hold a license as a contractor or journeyman or an apprentice permit issued by DCP and

authorized by the heating, piping, cooling, and sheet metal work board. The bill eliminates the current definition of “solar work” and instead defines “solar thermal work” as the installation, erection, repair, replacement, alteration, or maintenance of active, passive, and hybrid solar systems that directly convert ambient energy into heat or convey, store, or distribute the ambient energy. It defines “active solar system” as one that uses an external source of energy to power a motor-driven fan or pump to force the circulation of fluid through solar heat collectors and that takes the heat from the collectors and carries it to where it may be used or stored. It defines a “passive solar system” as one that can collect or store the sun’s energy as heat without using a motor-driven fan or pump. A hybrid system is one that has parts of each system. Under current law, “solar work” is the installation, repair, replacement, alteration, or maintenance of an active, passive, or hybrid solar hot water heating system. The bill renames the current solar work licenses and permits and solar thermal work licenses.

BACKGROUND

Occupational Licensing System

State law establishes a licensing system for several trades overseen by different licensing boards, including the Electrical Work Board and the Plumbing and Piping Work Board. They have the power to determine who qualifies for a license and to enforce standards by disciplining licensees. Boards may create limited licenses authorizing their holders to work in a specific area of a trade. Each trade has different levels of expertise—apprentice, journeyman, and contractor. Workers must meet education, training, and experience requirements to qualify for each level. The boards establish less extensive requirements for workers attempting to qualify for a limited license. DCP’s duties to the boards include receiving complaints, carrying out investigations, and performing administrative tasks, such as physically issuing licenses and renewals.

Legislative History

The House referred the bill (File 204) to the Legislative Management Committee on April 11, which reported the bill favorably without change on April 14.

COMMITTEE ACTION

General Law Committee

Joint Favorable Report
Yea 15 Nay 0

Joint Committee on Legislative Management

Joint Favorable Report
Yea 21 Nay 0